AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A light pipe comprising:

a first dichroic prism having a first mirror plane, the first mirror plane inclined with respect to the axis of incident light and reflecting a first color beam among white light while transmitting ~~the~~ other color beams;

a second dichroic prism having a second mirror plane, the second mirror plane inclined with respect to the axis of incident light and reflecting a second color beam among the color beams transmitted by the first dichroic prism while transmitting the other color beam; and

a third dichroic prism having a third mirror plane, the third mirror plane inclined with respect to the axis of incident light and reflecting a third color beam transmitted by the second dichroic prism,

wherein each of the first, second, and third dichroic prisms includes additional reflective planes, other than the first, second and third mirror planes, the additional reflective planes ~~that~~ reflect light that is incident at a predetermined angle due to a difference between the refractive indices of each of the additional reflective planes and the outside so that the incident light travels within the first, second, and third color dichroic prisms, and the additional reflective planes form ~~the~~ exteriors of the first, second, and third dichroic prisms and contribute to ~~reduce~~ reducing loss in the first, second, and third color beams.

2. (original): The light pipe of claim 1, further comprising:

a first polarized beam splitter which is installed on a light incidence plane of the first dichroic prism and transmits first light with one polarization direction among unpolarized white light toward the first dichroic prism while reflecting second light with the other polarization direction;

a second polarized beam splitter re-reflecting the second light received from the first polarized beam splitter toward the first dichroic prism; and

a 1/2 wavelength plate which is installed either between the first polarized beam splitter and the first dichroic prism or between the second polarized beam splitter and the first dichroic prism and converts the polarization direction of the second light to that of the first light, so that the unpolarized white light is converted into color beams with an identical polarization direction.

3. (original): The light pipe of claim 2, further comprising a condensing lens that is installed opposite to a light incidence plane of the first polarized beam splitter and condenses and transmits the unpolarized white light.

4. (original): The light pipe of claim 1, wherein the first, second, and third mirror planes are inclined at different angles with respect to the axis of the incident white light and reflect the first, second, and third color beams so that their axes are converged.

5. - 12. (canceled).

13. (currently amended): A color illumination system comprising:

a light source producing and radiating light;

a light pipe, which includes first, second, and third dichroic prisms having first, second, and third mirror planes, respectively, and separates incident light according to a wavelength

range and advances separated beams at different angles, wherein the first mirror plane is inclined with respect to the axis of incident light and reflects a first color beam among white light while transmitting ~~the~~ other color beams, the second mirror plane is inclined with respect to the axis of incident light and reflects a second color beam among the color beams transmitted by the first dichroic prism while transmitting ~~the other~~ another color beam, the third mirror plane is inclined with respect to the axis of incident light and reflects a third color beam transmitted by the second dichroic prism, and ~~the~~ an exterior of each of the first, second, and third dichroic prisms is formed by additional reflective planes, other than the first, second and third mirror planes, the additional reflective planes ~~which~~ reflect light that is incident at a predetermined angle due to a difference between the additional refractive indices of each of the reflective planes and the outside so that the incident light travels within the first, second, and third dichroic prisms;

a first focusing lens focusing the separated beams; and

a scrolling unit which changes the paths of the separated beams focused by the first focusing lens and periodically scrolls the separate beams.

14. - 16. (canceled).

17. (currently amended): A projection system comprising:

a light source producing and radiating light;

a light pipe, which includes first, second, and third dichroic prisms having first, second, and third mirror planes, respectively, and separates incident light according to a wavelength range and advances separated beams at different angles, wherein the first mirror plane is inclined with respect to the axis of incident light and reflects a first color beam among white light while transmitting ~~the~~ other color beams, the second mirror plane is inclined with respect to the axis of

incident light and reflects a second color beam among the color beams transmitted by the first dichroic prism while transmitting ~~the other~~ another color beam, the third mirror plane is inclined with respect to the axis of incident light and reflects a third color beam transmitted by the second dichroic prism, and the exterior of each of the first, second, and third dichroic prisms is formed by additional reflective planes, other than the first, second and third mirror planes, the additional reflective planes ~~which~~ reflect light that is incident at a predetermined angle due to a difference between the refractive indices of each of the additional reflective planes and the outside so that the incident light travels within the first, second, and third dichroic prisms;

a first focusing lens focusing the separated beams;

a scrolling unit which changes the paths of the separated beams focused by the first focusing lens and periodically scrolls the separate beams;

a second focusing lens re-focusing beams transmitted by the scrolling unit;

a fly-eye lens array delivering the beams transmitted by the scrolling unit;

a light valve producing an image from beams transmitted by the fly-eye lens array; and

a projection lens unit magnifying the image produced by the light valve and projecting the magnified image onto a screen.

18. (original): The projection system of claim 17, wherein the first, second, and third mirror planes are inclined at different angles with respect to the axis of the incident white light and reflect the first, second, and third color beams so that their axes are converged.

19. (original): The projection system of claim 17, further comprising:

a first polarized beam splitter which is installed on a light incidence plane of the first dichroic prism and transmits first light with one polarization direction among unpolarized white

light toward the first dichroic prism while reflecting second light with the other polarization direction;

a second polarized beam splitter re-reflecting the second light received from the first polarized beam splitter toward the first dichroic prism; and

a 1/2 wavelength plate which is installed either between the first polarized beam splitter and the first dichroic prism or between the second polarized beam splitter and the first dichroic prism and converts the polarization direction of the second light to that of the first light, so that the unpolarized white light is converted into color beams with an identical polarization direction.

20. (currently amended): The projection system of claim ~~17~~19, further comprising a condensing lens that is installed on a light path between the light source and the first polarized beam splitter and condenses and transmits the unpolarized white light.

21. (original): The projection system of claim 17, wherein each of the first and second focusing lenses is a cylindrical lens which focuses an incident beam so that the cross-section of the incident beam is only reduced in one direction.

22. (original): The projection system of claim 17, wherein each of the first and second focusing lenses is an optical diffraction element which has a diffraction pattern that focuses an incident beam so that the cross-section of the incident beam is only reduced in one direction.

23. (original): The projection system of claim 17, wherein the scrolling unit comprises:

a first cylindrical lens array which includes a plurality of cylindrical lenses that have identical refractive power, are arranged adjacent to one another, and independently converge or diverge incident beams; and

a first driving source which drives the first cylindrical lens array to reciprocate in a direction perpendicular to the axis of the incident beams so that the beams passing through the first cylindrical lens array can be scrolled.

24. (original): The projection system of claim 17, wherein the scrolling unit comprises:

a second cylindrical lens array which is apart from the first cylindrical lens array and includes a plurality of cylindrical lenses that have identical refractive power, are arranged adjacent to one another, and independently converge or diverge incident beams; and

a second driving source which drives the second cylindrical lens array to reciprocate in a direction perpendicular to the axis of the incident beams.

25. (original): The projection system of claim 17, wherein the scrolling unit comprises:

a revolving cylindrical lens array which is rotatably installed on a light path and formed by arranging a plurality of cylindrical lenses with identical refractive power adjacent to one another on an outer circumference of a cylinder; and

a driving source which rotates the revolving cylindrical lens array.

26. (original): The projection system of claim 25, wherein the revolving cylindrical lens array is an optical diffraction element that has a diffraction pattern that can perform the function of the cylindrical lenses.

27. (original): The projection system of claim 17, further comprising a relay lens which delivers beams transmitted by the fly-eye lens array to a predetermined location.

28. - 49. (canceled).